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### **EUROPEAN PATENT APPLICATION**

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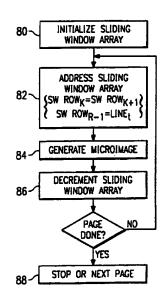
Remarks:

Divisional application 97113835.9 filed on 11/08/97.

## (54) Improvements relating to grayscale printing with spatial light modulator

(57) A method for printing grayscale images. A sliding window memory stores an array of exposure data. The memory is initialized (80) with zero values. The memory is then addressed (82) so that the last row of the array is filled with exposure data. A microimage is then generated based on the exposure data (84). The data in the array is then decremented (86). If the page to be printed is not completed, the array's addresses are rotated (82) so that the data for the first row drops out, the data for other rows is readdressed as the next row, and new data fills the last row.

FIG. 8





## EUROPEAN SEARCH REPORT

Application Number EP 96 11 0057

| Category  | Citation of document with ind<br>of relevant pass   | lication, where appropriate,<br>ages    | Relevant<br>to claim  | CLASSIFICATION OF TH<br>APPLICATION (Int.CL6)   |
|---|---|---|---|---|
| A   | EP 0 585 028 A (CANO<br>* abstract; figures<br>* column 9, line 3 -   | 2.12 *                                  | 1   | H04N1/40  |
| A   | EP 0 517 544 A (CANO<br>* abstract; figures<br>* page 10, line 2 -  | *                                       | 1   |   |
| A   | US 4 525 729 A (AGUL<br>* abstract; figures<br>-  | <br>NEK ET AL)<br>*<br>                 | 1   |   |
|   |   |   |   | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.6)<br>HO4N |
|   |   |   |   |   |
|   | The present search report has bee   |   |   |   |
|   | Place of search   | Date of completion of the search        |   | Exeminer  |
| X : part<br>Y : part<br>doc:<br>A : tech<br>O : non | THE HAGUE  CATEGORY OF CITED DOCUMENT cicularly relevant if combined with anoth ment of the same category inological background written disclosure mediate document | E: earlier patent d<br>after the filing | ocument, but publidate in the application for other reasons | invention<br>ished on, or                       |



## European Patent Office

|  | CLAIMS INCURRING FEES  |  |  |  |
|--|--|--|--|--|
| ĺ  |  |  |  |  |
| The present European patent application comprised at the time of filling more than ten claims  |  |  |  |  |
|  | All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.  |  |  |  |
|  | Only part of the claims fees have been paid within the prescibed time limit. The present European search report has been drawn up for the first ten claims and those claims for which fees have been   |  |  |  |
|  | namely claims:   |  |  |  |
|  | No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.   |  |  |  |
|  | LACK OF UNITY OF INVENTION   |  |  |  |
| The Search Division considers that the present European patent application does not comply with the requirement of the unity of the invention and relates to several inventions or groups of inventions, namely: |  |  |  |  |
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|  | All further search fees haven been paid within the fixed time limit. The present European search report has been drawn up for all claims   |  |  |  |
|  | Only part of the further claims fees have been paid within the prescibed time limit. The present<br>European search report has been drawn up for for those parts of the European patent application which<br>relate to the inventions in respects of which search fees have been paid, |  |  |  |
|  | namely claims:   |  |  |  |
| ×  | None of the further claims fees have been paid within the prescibed time limit. The present European search report has been drawn up for for those parts of the European patent application which relate to the invention first mentioned in the claims,                               |  |  |  |
|  | namely claims:   |  |  |  |



EP 96 11 0057 - B -

#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions, or groups of inventions, namely:

1. Claims 1-11

Method of printing a greyscale image.

2. Claims 12-14

Method of compensating for defective elements of a pixel

array imaging device where elements are "stuck on".

3. Claim 15

Method of compensating for the non-uniform illumination by

elements of a spatial light modulator.

EPO Form

Supplementary Sheet B (1996)